

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method comprising:
providing a plurality of individual image areas in an electronic programming guide (EPG) display;
receiving a user selection corresponding to a selected channel;
detecting a video stream corresponding to the selected channel;
capturing a plurality of snapshots from the video stream;
identifying a first snapshot from the plurality of snapshots captured from the video stream;
converting the first snapshot captured into a reduced image of real-time programming;
displaying a graphical representation of a polyhedron in a first of the individual image areas; and
displaying the reduced image of real-time programming on a side of the graphical representation of the polyhedron in the first of the individual image areas, wherein the reduced image is associated with the selected channel.
- 2-6. (Canceled)
7. (Previously Presented) The method of claim 1, wherein identifying the first snapshot comprises identifying a most presentable snapshot by comparing contrast levels among the plurality of snapshots and determining that the most presentable snapshot has a best contrast.
8. (Previously Presented) The method of claim 1, wherein identifying the first snapshot comprises identifying a most presentable snapshot by comparing brightness levels among the plurality of snapshots and determining that the most presentable snapshot has a median brightness.

9. (Previously Presented) The method of claim 1, wherein identifying the first snapshot comprises identifying a most presentable snapshot by comparing color saturation levels among the plurality of snapshots and determining that the most presentable snapshot has a highest color saturation.

10. (Previously Presented) The method of claim 1, wherein the first snapshot is filtered to change the display characteristics of the first snapshot.

11-16. (Canceled)

17. (Previously Presented) An apparatus comprising:

- a tuner configured to tune to a selected channel and to receive a video stream;
- a shutter function, configured to capture a plurality of snapshots from the video stream;
- an image improver, configured to identify a first snapshot from the plurality of snapshots captured from the video stream; and
- a display configured to:
 - display an electronic programming guide (EPG) comprising a plurality of individual image areas;
 - display a graphical representation of a polyhedron in a first of the individual image areas; and
 - display the first snapshot on a side of the graphical representation of the polyhedron in the first individual image area, wherein the first snapshot is associated with the selected channel.

18-20. (Canceled)

21. (Previously Presented) The apparatus of claim 17, wherein identifying by the image improver the first snapshot comprises comparing contrast levels among the plurality of snapshots and determining that the first snapshot has a best contrast.

22. (Previously Presented) The apparatus of claim 17, wherein identifying by the image improver the first snapshot comprises comparing brightness levels among the plurality of snapshots and determining that the first snapshot has a median brightness.

23. (Previously Presented) The apparatus of claim 17, wherein identifying by the image improver the first snapshot comprises comparing color saturation levels among the plurality of snapshots and determining that the first snapshot has a highest color saturation.

24-30. (Canceled)

31. (Previously Presented) One or more computer-readable media storing computer-executable instructions, that when executed on a computer, cause the computer to perform a method comprising:

- providing a plurality of individual image areas in an electronic programming guide (EPG) display;

- receiving a user selection corresponding to a selected channel;

- detecting a video stream corresponding to the selected channel;

- capturing a plurality of snapshots from the video stream;

- identifying a first snapshot from the plurality of snapshots captured from the video stream;

- converting the first snapshot captured into a reduced image of real-time programming;

- displaying a graphical representation of a polyhedron in a first of the individual image areas; and

- displaying the reduced image of real-time programming on a side of the graphical representation of the polyhedron in the first of the individual image areas, wherein the reduced image is associated with the selected channel.

32-47. (Canceled)

48. (Previously Presented) The method of claim 1, further comprising:

identifying a segment of the video stream corresponding to the selected channel;
converting the segment of the video stream to a reduced resolution video stream; and
displaying the reduced resolution video stream on the side of the graphical representation of the polyhedron in the first of the individual image areas.

49. (Previously Presented) The apparatus of claim 17, further configured to:
identify a segment of the video stream corresponding to the selected channel;
convert the segment of the video stream to a reduced resolution video stream; and
display the reduced resolution video stream on the side of the graphical representation of the polyhedron in the first of the individual image areas.

50. (Canceled)

51. (Previously Presented) A method for displaying programming information in an electronic programming guide comprising:

receiving at a television system a video stream corresponding to a plurality of television channels;

receiving a plurality of user selections, wherein each user selection identifies a television channel selected to be displayed within an electronic programming guide on the television system;

capturing a plurality of snapshot images from the video stream based on the plurality of user selections, wherein the plurality of snapshot images comprises at least one video image from each of a plurality of current television programs playing on the plurality of selected television channels;

converting each of the plurality of snapshot images to reduced size thumbnail images;

displaying a first graphical representation of a 3-dimensional polyhedron within the electronic programming guide, wherein a plurality of geometric surfaces of the 3-dimensional polyhedron are simultaneously visible within the electronic programming guide, and wherein the plurality of visible geometric surfaces are rendered on different portions of the screen and have

different sizes, and wherein the plurality of visible geometric surfaces are each rendered with a different lighting level based on the relative positions of the surfaces within the polyhedron;

mapping each of the plurality of reduced size thumbnail images to distinct geometric surfaces of the 3-dimensional polyhedron;

receiving user input via the electronic programming guide selecting one of the geometric surfaces of the 3-dimensional polyhedron;

identifying the television channel associated with the geometric surface selected via the user input;

creating an updated reduced sized thumbnail image based on the at least one video image from the identified television channel; and

displaying a second graphical representation in which the 3-dimensional polyhedron is rotated within the electronic programming guide such that the geometric surface corresponding to the identified television channel is rendered in a larger portion of the screen than the corresponding surface in the first graphical representation.

52. (Previously Presented) The method of claim 1, wherein identifying the first snapshot from the plurality of snapshots captured from the video stream comprises detecting a scene change in the video stream corresponding to the selected channel.

53. (Previously Presented) The method of claim 1, wherein displaying the graphical representation of the polyhedron comprises rendering a plurality of reduced images of real-time programming on different sides of the polyhedron, wherein each of the plurality of reduced images of real-time programming corresponds to a snapshot from a different channel, and wherein the different sides of the polyhedron are rendered on different portions of the electronic programming guide (EPG) display, the different portions being simultaneously visible and having different sizes and shapes in the electronic programming guide (EPG) display.

54. (Previously Presented) The apparatus of claim 17, further comprising a scene change detector configured to detect a scene change in the video stream, wherein the image improver is configured to identify the first snapshot based on a scene change detected in the video stream.

55. (Previously Presented) The apparatus of claim 17, wherein displaying the graphical representation of the polyhedron comprises rendering a plurality of snapshots on different sides of the polyhedron, wherein each of the plurality of snapshots corresponds to a different channel, and wherein the different sides of the polyhedron are rendered on different portions of the electronic programming guide (EPG), the different portions being simultaneously visible and having different sizes and shapes in the electronic programming guide (EPG).

56. (New) The method of claim 1, wherein each side of the polyhedron corresponds to a different video channel having a different video stream, the method further comprising:
receiving a user command to rotate the graphical representation of the polyhedron; and
updating the EPG display by rotating the graphical representation of the polyhedron so that one of the different selected channels is displayed in the first of the individual image areas.

57. (New) The method of claim 56, wherein each of the different video channels corresponding to the different sides of the polyhedron is a video channel selected by a user for displaying on the polyhedron, and wherein the video channels selected for displaying on the polyhedron are a subset of a larger number of video channels available to the user via the electronic programming guide.

58. (New) The method of claim 56, wherein each of the different video channels corresponding to the different sides of the polyhedron is a preselected video channel selected by a head-end administrator of the electronic programming guide.

59. (New) The apparatus of claim 17, wherein each side of the polyhedron corresponds to a different video channel having a different video stream, wherein the apparatus further comprises a receiver configured to receive a user command to rotate the graphical representation of the polyhedron, and wherein the display is further configured to update the display by rotating the graphical representation of the polyhedron so that one of the different selected channels is displayed in the first individual image area.

60. (New) The apparatus of claim 59, wherein each of the different video channels corresponding to the different sides of the polyhedron is a video channel selected by a user for displaying on the polyhedron, and wherein the video channels selected for displaying on the polyhedron are a subset of a larger number of video channels available to the user via the electronic programming guide.

61. (New) The apparatus of claim 59, wherein each of the different video channels corresponding to the different sides of the polyhedron is a preselected video channel selected by a head-end administrator of the electronic programming guide.

62. (New) The method of claim 1, further comprising:
receiving a user command to perform at least one of moving the graphical representation of the polyhedron and resizing the graphical representation of the polyhedron; and
updating the EPG display in response to the user command, the updating comprising at least one of:

moving the graphical representation of the polyhedron to a different one of the individual image areas in the display of the electronic programming guide, and

changing the size of the graphical representation of the polyhedron within the display of the electronic programming guide.

63. (New) The apparatus of claim 17, the apparatus further comprising:
a receiver configured to receive a user command to perform at least one of moving the graphical representation of the polyhedron and resizing the graphical representation of the polyhedron,

wherein the display is further configured to update the display in response to the user command, the updating comprising at least one of:

moving the graphical representation of the polyhedron to a different one of the individual image areas in the display of the electronic programming guide, and

changing the size of the graphical representation of the polyhedron within the display of the electronic programming guide.

64. (New) The computer-readable media of claim 31, the method further comprising:
receiving a user command to perform at least one of moving the graphical representation of the polyhedron and resizing the graphical representation of the polyhedron; and
updating the EPG display in response to the user command, the updating comprising at least one of:

moving the graphical representation of the polyhedron to a different one of the individual image areas in the display of the electronic programming guide, and

changing the size of the graphical representation of the polyhedron within the display of the electronic programming guide.